PATENT ABSTRACTS OF JAPAN

(11)Publication number:

11-251253

(43)Date of publication of application: 17.09.1999

51)Int.CI.

H01L 21/205

H01L 31/02

H01L 33/00

H01S 3/18

21)Application number: 10-052573

(71)Applicant: NICHIA CHEM IND LTD

22) Date of filing:

05.03.1998

(72)Inventor: OZAKI NORIYA

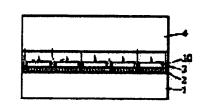
KIYOHISA HIROYUKI

NAKAMURA SHUJI

54) NITRIDE SEMICONDUCTOR SUBSTRATE AND MANUFACTURE THEREOF

57)Abstract:

'ROBLEM TO BE SOLVED: To provide a method for nanufacturing a nitride semiconductor substrate having good rystallinity, and a nitride semiconductor substrate. SOLUTION: By providing a first step of growing an underlaying ayer 2 made of a first nitride semiconductor on a differentype substrate 1, made of a material different from a nitride emiconductor and not growing a nitride semiconductor on he surface of the underlying layer 2 or partially forming a rotective film 10 which is hard to grow, a second step of rowing a second nitride semiconductor 3 from the underlying ayer 2 up to the top of the protective film 10 by a metal rganic vapor phase growth method after the first step, and a hird step of growing a third nitride semiconductor 4 having a hickness greater than that of the second nitride emiconductor 3 on the second nitride semiconductor 3 by a ydride vapor phase growth method after the second step, a rystal defect in the nitride semiconductor substrate is stopped halfway through the growth.



EGAL STATUS

Date of request for examination]

Date of sending the examiner's decision of siection

Kind of final disposal of application other than ne examiner's decision of rejection or pplication converted registration]

Date of final disposal for application

Patent number

Date of registration

Number of appeal against examiner's decision of rejection

Date of requesting appeal against examiner's decision of rejection

Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office